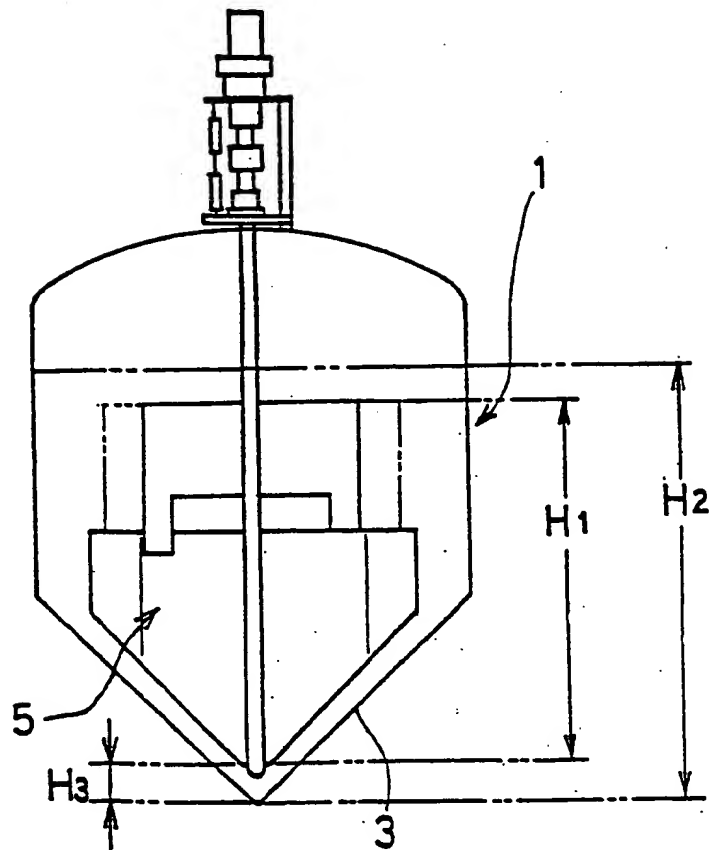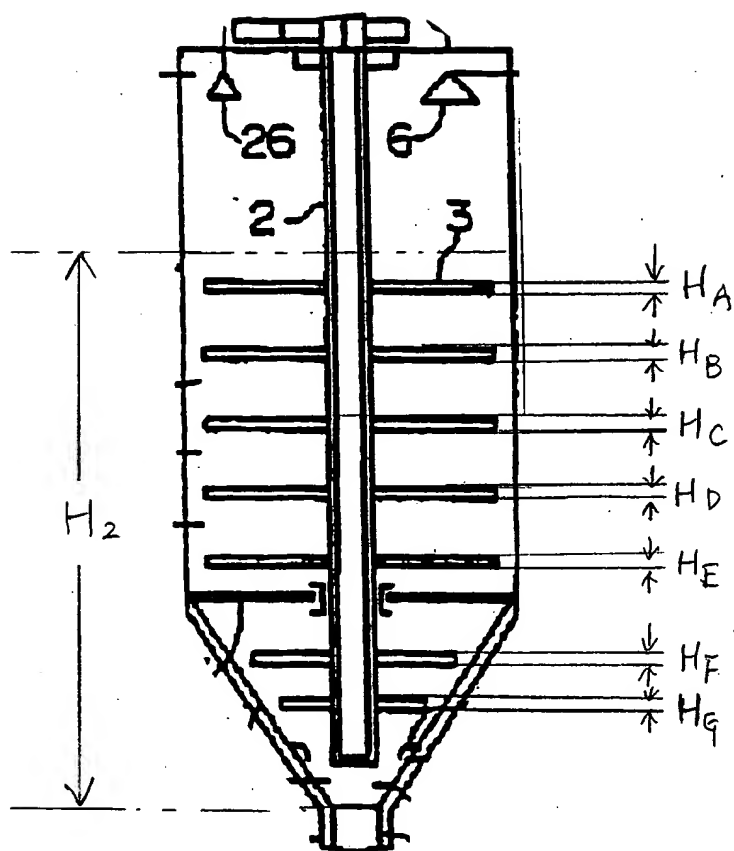Reference Illustration 1

Reference Illustration 2

References 3 – A

SHEAR RATE(1/S)

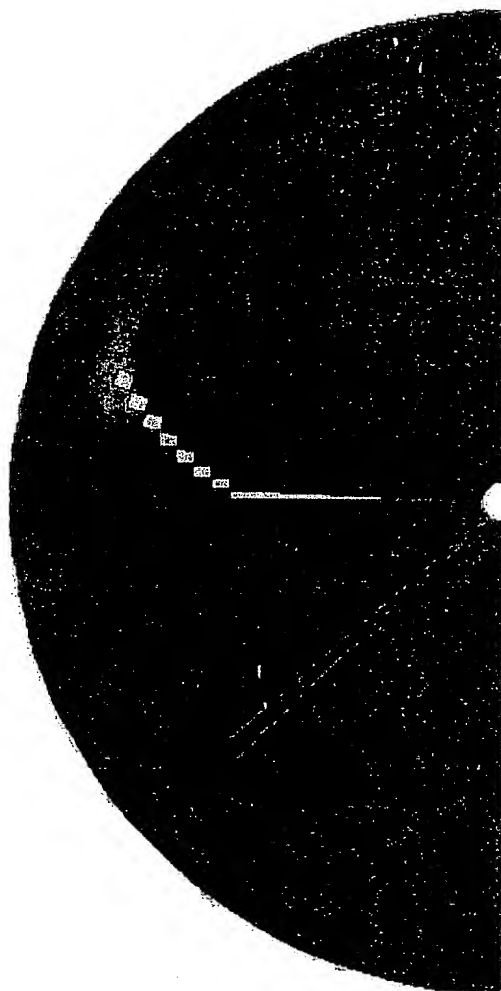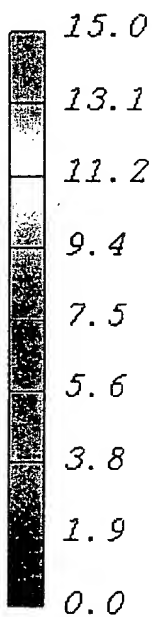|	
	15.00
	13.12
	11.25
	9.38
	7.50
	5.62
	3.75
	1.88
	0.00
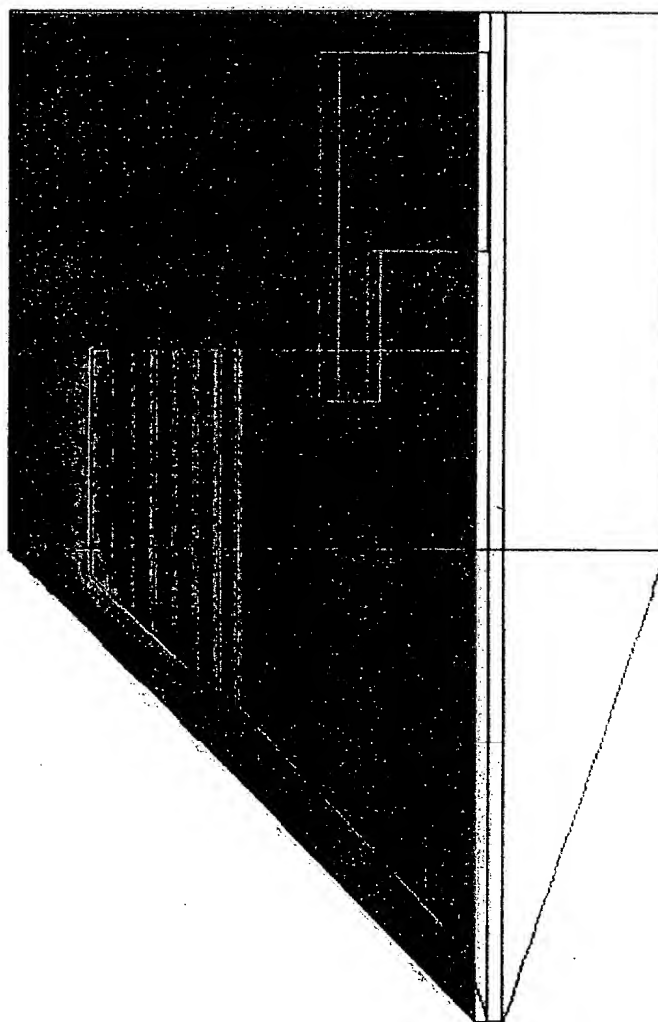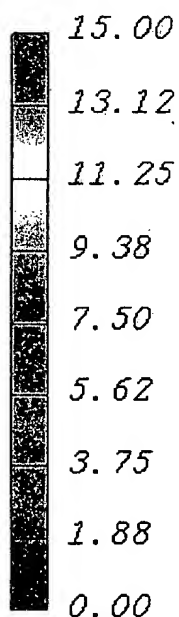
FZ(d/D=0.83),LOWER–BLADE
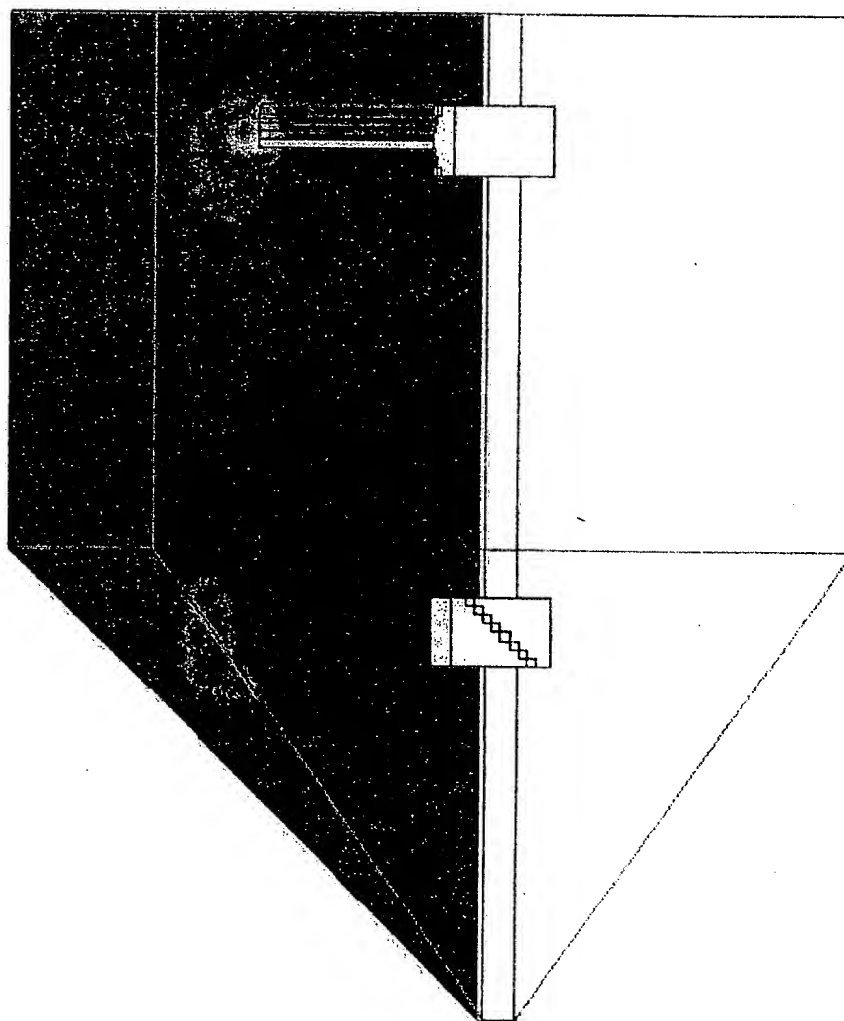
References 3-B

SHEAR RATE(1/S)

15.0

13.1

11.2

9.4

7.5

5.6

3.8

1.9

0.0

FZ(d/D=0.23),LOWER-BLADE
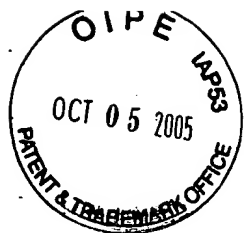
References 3-C

SHEAR RATE(1/S)

15.0
13.1
11.2
9.4
7.5
5.6
3.8
1.9
0.0
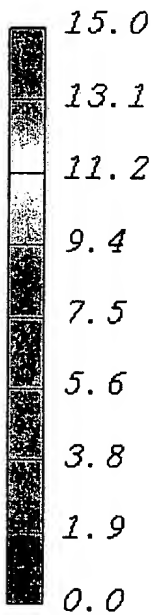
PP(d/D=0.5),UPPER-BLADE

References 3-D

SHEAR RATE(1/S)

15.0

13.1

11.2

9.4

7.5

5.6

3.8

1.9

0.0

PP(d/D=0.5),UPPER-BLADE
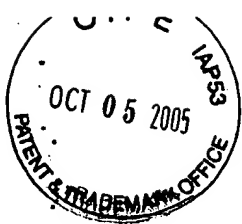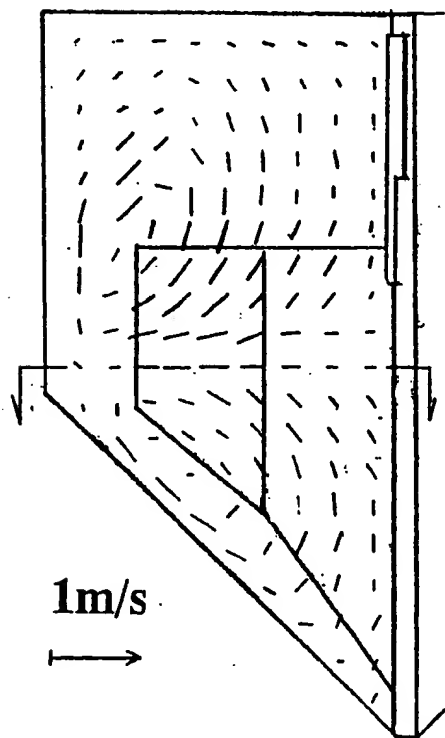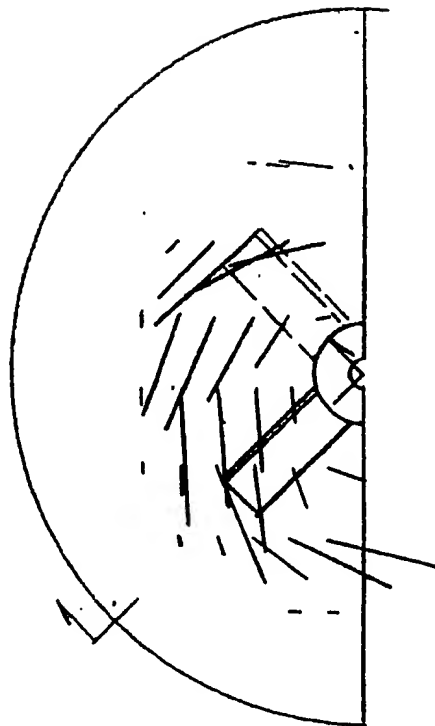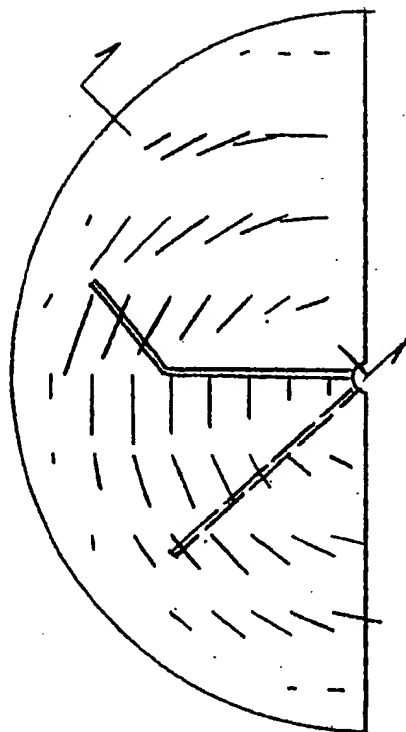
1m/s
$\longrightarrow$

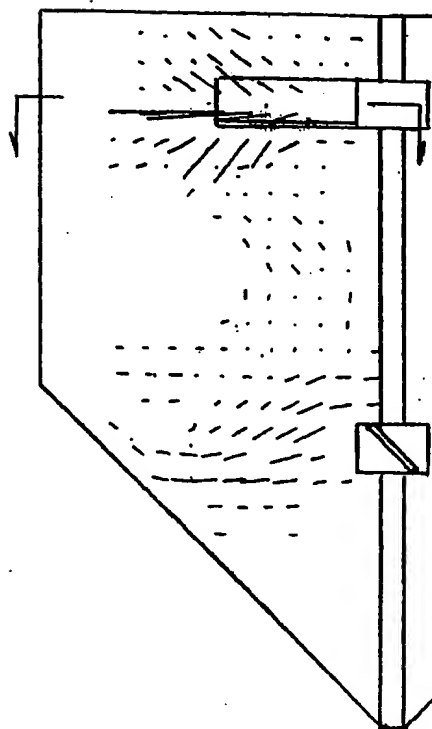*Fullzone 10 rpm*

PBT 60 rpm

Numrical simulation ~ **Flow pattern** ~

5 m3 Yeast tank